

AMENDMENTS TO THE CLAIMS

Please amend claims 2 – 4 and 8, as set forth in the listing of claims that follows:

Listing of Claims

(insert attached listing of marked-up claims)

1. (Previously Amended) An occupant recognition system for vehicles comprising:

at least one pressure sensor disposed adjacent a foam vehicle seat;
at least one temperature sensor spaced from said seat and operative to monitor ambient air temperature within said vehicle; and
an electronic control and evaluation unit connected to said sensors and operative to match the time behavior of sensed changes in the ambient air temperature to the time behavior of the temperature prevailing in the region of the pressure sensor.

2. (Currently Amended) An occupant recognition system in accordance with claim 1, wherein a correspondingly matched output signal of the at least one temperature sensor ~~in the electronic control and evaluation unit~~ is used for the compensation of the temperature dependence of the pressure measured via the pressure sensor.

3. (Currently Amended) An occupant recognition system in accordance with claim 1, wherein ~~the~~ matching means are embodied within the electronic control and evaluation unit.

4. (Currently Amended) An occupant recognition system in accordance with ~~claim 1~~ claim 3, wherein the matching means includes a low-pass filter.

5. (Previously Amended) An occupant recognition system in accordance with claim 4, wherein the low-pass filter comprises a software filter.

6. (Previously Amended) An occupant recognition system in accordance with claim 4, wherein a Butterworth filter is provided as the low-pass filter.

7. (Previously Amended) An occupant recognition system in accordance with claim 4, wherein a Butterworth filter of the first order is provided as the low-pass filter.

8. (Currently Amended) An occupant recognition system in accordance with claim 4, wherein parameters of the filter are selected such that ~~the a~~ a filtered output signal of the temperature sensor substantially coincides with actual foam temperature.

9. (Previously Amended) An occupant recognition system in accordance with claim 1, wherein the pressure sensor includes a flexible sensor mat filled with fluid.

10. (Previously Amended) An occupant recognition system in accordance with claim 9, wherein the pressure sensor supplies a pressure value corresponding to the pressure inside the sensor mat.

11. (Previously Amended) An occupant recognition system in accordance with claim 1, wherein the pressure sensor is disposed directly beneath the seat foam.

12. (Previously Amended) An occupant recognition system in accordance with claim 1, wherein the temperature sensor includes a thermistor.

13. (Previously Amended) An occupant recognition system in accordance with claim 1, wherein the temperature sensor is disposed adjacent the electronic control and evaluation unit.

14. (Previously Amended) An occupant recognition system in accordance with claim 13, wherein the temperature sensor is disposed in a common housing with the electronic control and evaluation unit.

15. (Previously Amended) An occupant recognition system in accordance with claim 1, wherein the electronic control and evaluation unit is disposed beneath the vehicle seat.

16. (Previously Amended) An occupant recognition system in accordance with claim 1, wherein the pressure measured via the pressure sensor is compared by means of the electronic control and evaluation unit with at least one parameter value and a vehicle airbag switch status is changed in response thereto.

17. (Original) A vehicle occupant recognition system comprising:
- at least one pressure sensor adapted to be disposed adjacent a vehicle foam seat cushion;
 - at least one temperature sensor adapted to be spaced from said foam seat cushion and operative to monitor ambient temperature within said vehicle and to generate an output signal in response thereto; and
 - a control unit in circuit with said sensors operative to match the time behavior of said temperature sensor output signal to the time behavior of the temperature prevailing in a region of the seat foam adjacent said pressure sensor.